

ABSTRACT OF THE DISCLOSURE

An electrostatic actuator for increasing a swing (deflection angle) of a movable structure includes a laminate substrate in which a thin film silicon layer is formed on a silicon substrate through a buried insulating film and a torsion beam movable structure constructed with the thin film silicon layer. A potential difference is generated between a movable side comb-tooth electrode of the movable structure and a fixed side comb-tooth electrode disposed to face the movable side comb-tooth electrode to swing the movable structure. The fixed side comb-tooth electrode is formed in the inside of a through hole bored through the laminate substrate.